Boulder Creek Restoration Project

Inventoried Roadless Area (IRA) Report

Prepared by:

Dan Gilfillan North Zone Recreation Staff

For:

Bonners Ferry Ranger District Idaho Panhandle National Forests

10/1/2017

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer and lender.

Table of Contents

Introduction	
Relevant Laws, Regulations, and Policy	
Regulatory Framework	
Topics and Issues Addressed in This Analysis	
Purpose and Need	(
Issues	(
Other Resource Concerns	(
Resource Indicators and Measures	· · · · · · · · · · · · · · · ·
Methodology	9
Information Sources	
Incomplete and Unavailable Information	1
Spatial and Temporal Context for Effects Analysis	1
Affected Environment	
Existing Condition (Mt. Willard-Lake Estelle IRA)	1
Existing Condition (Katka Peak IRA)	
Environmental Consequences (Direct and Indirect Effects)	23
Effects Common to Alternative 1 and Alternative 3 (No Activities in the Roadless Areas)	23
Alternative 2 – (Burn Units Only in Inventoried Roadless Areas)	
Summary of Environmental Effects	3
Compliance with the Forest Plan and Other Relevant Laws, Regulations, Policies and Plans	35
Intensity Factors for Significance (FONSI) (40 CFR 1508.27(b))	
References Cited	
Tables Table 1. Decrease in line to a second and a second a second and a second and a second and a second and a second an	,
Table 1 - Resource indicators and measures for assessing effects to Inventoried Roadless Values Table 3 - Katka Peak IRA Management Classification	
Table 4 - Availability determination from the IPNF Revised Land management Plan (Katka Peak #1 Table 5 – Mt. Willard-Lake Estelle IRA Management Classification	
Table 6 - Resource indicators and measures for the existing condition (Mt. Willard-Lake Estelle #17	
Table 7 - Resource indicators and measures for alternative 1 (IRAs and Roadless Expanse)	
Table 8 – Management Activities Proposed Under Alt. 2 in Katka Peak IRA	
Table 9 – Management Activities Proposed Under Alt. 2 in Mt. Willard Lake Estelle	
Table 10 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	
	3
Table 11 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	
Table 11 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	
Table 11 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	
Table 11 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	
Table 11 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	
Table 11 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	
Table 11 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	
Table 11 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)	

Introduction

The purpose of this analysis on the roadless resource is to disclose potential effects to roadless and wilderness attributes and determine if, or to what extent it might affect future consideration for wilderness recommendations. This analysis focuses on the potential effects of project activities on wilderness characteristics as defined in the Forest Service Handbook (FSH) 1909.12 (72.1). Professional judgment was incorporated in determining the project's potential effects. On the ground analysis was obtained by walk through surveys including assessments from known recreation resources (e.g. trails and viewpoints). Field surveys were conducted during the 2015 & 2016 field seasons by Bonners Ferry Ranger District Recreation Personnel (Pat Hart, Steve Petesch, and Bonners Ferry RD Trail Crews).

The project area boundary encompasses part of the Kata Peak Roadless Area. The Kata Peak Roadless Area is 10,300 acres in size and the project area overlaps with 5,627 acres. The project area boundary also encompasses part of Mt. Willard-Lake Estelle IRA Roadless Area. The Mt. Willard-Lake Estelle Roadless Area is 68,000 acres in size and the project area overlaps with 18,734 acres. The roadless expanse considered for the Kata Peak Roadless Area is the IRA itself. It is surrounded by lands of mixed ownership and roads. The roadless expanse considered for the Mt. Willard-Lake Estelle IRA is the norther most boundary of the IRA extending down to the southern boundary of the Scotchman Peaks Recommended Wilderness. The roadless expanse extends from the western boundary of the Mt. Willard Lake Estelle IRA to the Eastern most portions of the Willard Estelle IRA on the Kootenai National Forest.

Inventory criteria was utilized from FSH 1909.12 71.1 to determine if the unroaded lands contiguous to the roadless areas meets the inventory criteria. If the lands meet the inventory criteria then the bounds of analysis is the entire roadless area expanse, that is, the un-inventoried lands contiguous to roadless area, in addition to the roadless area. Inventoried roadless area characteristics found within both Katka Peak IRA and Mt. Willard-Lake Estelle IRA are directly related to the purpose and need (FSH.1909.15, 11.21) and issues (FSH 1909.15, 12.4) identified through scoping.

Relevant Laws, Regulations, and Policy

Regulatory Framework

Land and Resource Management Plan

The Idaho Panhandle National Forest Land and Resource Management Plan (Forest Plan) established Forest-wide multiple use goals, objectives, and management area requirements as well as management area prescriptions. The analysis of roadless lands, documented in Appendix C of the FEIS for the Plan, describes each roadless area, the resources and values considered, the range of alternative land uses studied, and the effects of management under each alternative. As a result to the analysis some roadless areas were recommended for inclusion in the National Wilderness Preservation System and others were assigned various non-wilderness prescriptions. The Katka Peak & Mt. Willard-Lake Estelle roadless areas were assigned to Management Areas (MA) MA5—Backcountry, which is relatively large areas, generally without roads. The proposed action would occur within MA5 Backcountry & MA6 General Forest. The un-inventoried lands contiguous to the Mt. Willard-Lake Estelle roadless area was assigned to MA 6, which consists of relatively large areas with roads, trails, and structures, as well as signs of past and ongoing activities designed to actively manage the forest vegetation.

The forest plan did not make an "irreversible and irretrievable" commitment of resources to develop. The purpose of this analysis is to evaluate the environmental consequences of the proposed action and alternatives on the wilderness characteristics in the roadless area expanse.

- FW-STD-IRA-01. Within inventoried roadless areas, outside of the state of Idaho, the 2001 Roadless Area Conservation Rule (36 CFR 294 Subpart B, published at 66 Fed Reg. 3244-3273) shall apply. IRAs are identified in a set of inventoried roadless area maps, contained in the Forest Service Roadless Area Conservation, Volume 2, dated November 2000, which are held at the national headquarters office of the Forest Service, or any subsequent update or revisions of those maps (36 CFR 294.11). Maps of the IRAs are also found in appendix C of the Forest Plan FEIS.
- ♦ **FW-STD-IRA-02.** Within inventoried roadless areas in the state of Idaho, Idaho Roadless Rule (36 CFR 294 Subpart C) shall apply. Idaho Roadless Areas are identified in a set of maps maintained at the national headquarters office of the Forest Service.
- ♦ FW-STD-IRA-03. Within inventoried roadless areas in the state of Idaho, provisions in the Idaho Roadless Rule (36 CFR 294 Subpart C) shall take precedence over any inconsistent land management plan component unless and until the rule is amended. Land management plan components that are not inconsistent with the Rule will continue to provide guidance for projects and activities within Idaho Roadless Areas; as shall those related to protection of threatened and endangered species (36 CFR 294.28(d)).
- FW-GDL-IRA-01. Wilderness potential will be maintained on 16 percent of the inventoried roadless areas on the Forest.

Management Area

MA5—Backcountry

Approximately 92 percent of this MA is within inventoried roadless areas. This MA is relatively large areas, generally without roads, and provides a variety of motorized and non-motorized recreation opportunities. Trails are the primary improvements constructed and maintained for recreation users. In some areas, lookouts, cabins, or other structures are present as well as some evidence of management activities. Most lands within this MA occur within Idaho Roadless Areas classified as backcountry/restoration. If within an inventoried roadless area, management requirements under 36 CFR 294 Subpart C (inside Idaho) or Subpart B, 66 Fed Reg. 3244-3273 (outside of Idaho) apply.

MA-6 -General Forest

Most of this MA consist of relatively large areas with roads trails, and structures, as well as sign of past and ongoing activities designed to actively manage the forest vegetation. This MA provides a wide variety of recreation opportunities, both motorized and non-motorized. The density of motorized routes in this MA is higher than most of the other MAs. Constructed improvements in the MA generally consist of campground, picnic or day use areas, trails, lookouts, and cabins. Most of the WUI on the Forest occurs within MA6 and activities designed to reduce hazardous fuels are common.

Additional information on Forest Plan compliance can be found in the project record in the Boulder Recreation Forest Plan Forest wide Consistency Spreadsheet.

Special Area Designations – Inventoried Roadless Areas

Inventoried Roadless Areas are a group of United States Forest Service lands that have been identified by government reviews as lands without existing roads that could be suitable for roadless area conservation as wilderness or other non-standard protections.

Federal Law

The Wilderness Act of 1964 (Public Law 88-577) (78 Stat. 890) (September 3, 1964):

The Wilderness Act states Congressional policy, establishes a National Wilderness Preservation System, defines wilderness, provides administrative and management direction, prohibits certain uses and activities, and establishes a process for adding wild lands to the NWPS. This act also lists the original areas included in the NWPS, and it provides a study and evaluation process for additional areas.

Multiple Use, Sustained Yield Act. June 12, 1960. (74 Stat. 215, as amended: 16 U.S.C. 528-531): Sec. 1 "It is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes."

Sec. 2 "The Secretary of Agriculture is authorized and directed to develop and administer the renewable surface resources of the national forests of the national forests for multiple use and sustained yield of the several products and services obtained there from." "The establishment and maintenance of areas of wilderness are consistent with the purposes and provisions of this Act."

Forest Service Manual 2320 – Wilderness Management:

FSM 2320 directs the Forest Service in managing wilderness. The Wilderness Act is the overriding legislative direction, and FSM 2320 provides more detailed administrative guidance for compliance with the Wilderness Act and Forest Service policy.

Endangered American Wilderness Act of 1978 (Public Law 95-237) (February 24, 1978):

By passing the Endangered Wilderness Act, Congress further established that areas previously modified or influenced by man should not be precluded from wilderness designation, nor should roadless areas near major cities since they provide primitive recreation opportunities close to population concentrations. The Congressional Record for this law endorsed the Forest Service plan to conduct a RARE II evaluation.

The 2001 Roadless Rule (36 CFR 294, subpart B [2004]; 66 Fed. Reg. 3244 [Jan. 12, 2001]):

The purpose of the 2001 Roadless Rule was to ensure that inventoried roadless areas sustain their values for this generation and for future generations. By sustaining these values, a continuous flow of benefits associated with healthy watersheds and ecosystems was expected.

<u>Timber cutting activities and road construction/reconstruction were identified as having the greatest likelihood of altering and fragmenting landscapes, and the greatest likelihood of resulting in an immediate, long-term loss of roadless area values and characteristics;</u> therefore, these activities were prohibited, with certain exceptions in each roadless area. The rule allows for road construction or reconstruction in the case of reserved or outstanding rights, or as provided for by statute or treaty. This would include roads associated with locatable mineral activities pursuant to the General Mining Law of 1872.

Idaho Roadless Area Rule (36 CFR 294 Subpart C):

Developed through a collaborative process that included conservation groups Idaho Conservation League and Trout Unlimited, along with county commissioners, timber companies, hunters and recreation groups. Instead of blanket restrictions on the use of all IRAs, as provided by the national Roadless Rule, the Idaho Rule creates several different categories of lands within Idaho's 9.3 million acres of IRAs and applies different management "themes" to each category. Under three of the themes covering over 3 million acres, the Idaho Rule provides more protection than the national Roadless Rule, banning all roadbuilding, with a single exception for roads required by "statute, treaty, reserved or outstanding rights, or

other legal duty of the United States." Unlike the national rule, however, the Idaho Rule does permit some temporary road-building and logging in lands covered by the "Backcountry/Restoration" (BCR) theme, while providing certain restrictions to ensure that the roadless characteristics of the lands are maintained or improved over the long term.

Executive Orders

Secretary's Memorandum 1042-154:

On May 29, 2009 the Secretary of Agriculture ordered that the Secretary of Agriculture holds the decision-making authority "over the construction and reconstruction of roads and the cutting, sale, or removal of timber in inventoried roadless areas."

Secretary's Memorandum 1042-155:

On June 18, 2010 the Secretary of Agriculture renewed his reservation of final decision authority over certain forest management and road construction projects in inventoried roadless areas. This memorandum states that, "Advance communication and coordination with this office on all activities associated with projects in inventoried roadless areas is essential and should continue as currently conducted.

Secretary's Memorandum 1042-156:

On May 30, 2011 the Secretary of Agriculture reserved to the Secretary the decision making authority over the construction and reconstruction of roads and the cutting, sale, or removal of timber in inventoried roadless areas on certain lands administered by the Forest Service.

Secretary's Memorandum:

On March 2, 2012, the Secretary of Agriculture issued a final memo requiring review and approval of certain activities in Roadless Areas. "Except as noted, the Chief will review all projects involving road construction or reconstruction and the cutting, sale, or removal of timber in those areas identified in the set of inventoried roadless area maps contained in the Forest Service Roadless Area Conservation, Final Environmental Impact Statement Volume 2 dated November 2000." It further stated that "This process does not apply to lands subject to 36 CFR 294, Subpart C (Idaho Roadless Rule) and 36 CFR 294, Subpart D (Colorado Roadless Rule)."

Other Guidance or Recommendations

Forest Service Handbook 1909.12, Chapter 70 – NFS lands that qualify as an IRA:

Criteria for determining whether an area of NFS land qualifies as an IRA are provided in Forest Service Handbook 1909.12 Chapter 70, which states: "Areas qualify for placement on the potential wilderness inventory if they meet the statutory definition of wilderness. Include areas that meet either criteria 1 and 3, or criteria 2 and 3 below."

- 1. Areas contain 5,00 acres or more;
- 2. Areas contain less than 5,000 acres, but can meet one or more of the following criteria:
 - a. Areas can be preserved due to physical terrain and natural conditions;
 - b. Areas are self-contained ecosystems, such as an island, that can be effectively managed as a separate unit of National Wilderness Preservation System; and

c. Areas are contiguous to existing wilderness, primitive areas administration-endorsed wilderness, or potential wilderness in other federal ownership, regardless of their size.

Potential wilderness areas may qualify for the inventory even though they include the following types of areas or features:

3. Timber harvest areas where logging and prior road construction are not substantially noticeable.

Forest Service Manual 2320 – Wilderness Management:

FSM 2320 directs the Forest Service in managing wilderness. The Wilderness Act is the overriding legislative direction, and FSM 2320 provides more detailed administrative guidance for compliance with the Wilderness Act and Forest Service policy.

Topics and Issues Addressed in This Analysis

Purpose and Need

The purpose and need for the Boulder Creek Restoration Project (BCRP) speaks to the aquatic, vegetation, fire and fuels, recreation, and wildlife habitat related resources. All of which correlate to the Wilderness Attributes and Roadless Area Characteristics found within the analysis area.

Issues

Issues relevant to the Inventoried Roadless Area resources include:

- 1. Wilderness Attributes.
- 2. Inventoried Roadless Area Characteristics.

These issues were chosen as directed by National Policy and Forest Plan Direction. The National Environmental Policy Act (NEPA) requires integrated use of the natural and social sciences in all planning and decision-making that affects the human environment. The human environment includes the natural and physical environment and the relationship of people to the environment (40 CFR 1508.14).

Other Resource Concerns

Scoping comments from the Alliance for Wild Rockies (Letter #12) stated that, "We strongly oppose the proposal to logging around 2000 acres in roadless areas and conduct prescribed burning in another 6000 acres to "restore". The best available science indicates the highest ecological integrity is where there have been no management manipulations such as logging, road building, etc."

"We are opposed to further management manipulations in roadless areas—whether "inventoried" or left out of the official inventory during some arbitrary previous FS process. The PA doesn't explain why its "purpose and need" cannot be adequately achieved in the roaded portion of the project area."

"Please conduct an analysis to determine if the IPNF's roadless inventory relevant to the project area is accurate. An analysis of potential effects on roadless areas is can only occur if the boundaries are accurate and logical."

Alternative 3 was developed to address the concerns expressed by the Alliance for Wild Rockies.

Resource Indicators and Measures

Indicator measures are intended to address how each action individually (direct and indirect effects) and each alternative as the sum total of its proposed actions (cumulative effects) respond to the Forest Plan.

Wilderness Attributes and Inventoried Roadless Area Characteristics

Wilderness attributes are described for each roadless area regardless of whether they are located within Idaho or outside of Idaho. Expected changes are presented for the action alternatives. Wilderness characteristics, as defined at FSH 1909.12 (72.1) and evaluated here include the following:

- 1. Natural The extent to which long-term ecological processes are intact and operating.
- 2. Undeveloped The degree to which the impacts documented in natural integrity are apparent to most visitors.
- 3. Outstanding opportunities for solitude or primitive unconfined recreation Solitude is a personal, subjective value defined as the isolation from sights, sounds, and presence of others and from developments and evidence of humans. Primitive recreation is characterized by meeting nature on its own terms, without comfort and convenience of facilities.
- 4. Special features and values Unique ecological, geographical, scenic, and historical features of an area.
- 5. Manageability The ability to manage an area for wilderness consideration and maintain wilderness attributes.

The analysis for the effects on other roadless resource attributes such as water resources, soils, and wildlife habitat may be found in other sections of the BCRP EA.

The Idaho Roadless Rule (36 CFR 294 Subpart C)

Actions being proposed in this project located within roadless areas <u>outside of the states of Idaho</u> must comply with the 2001 Roadless Area Conservation Rule (36 CFR 294 Subpart B, published at 66 fed Reg. 3244-3273). In this case part of the Mt. Willard-Lake Estelle IRA is located within the state of Montana.

Action within inventoried roadless areas in the state of Idaho must comport with the Idaho Roadless Area Rule (36 CFR 294 Subpart C). Management classifications for Idaho Roadless Areas are expressed in a management continuum with the "Wild Land Recreation" category being the most restrictive and the "General Forest" category being the least restrictive.

Management classifications include:

- 1. Wild Land Recreation;
- 2. Special Areas of Historic or Tribal Significance;
- 3. Primitive;
- 4. Backcountry/Restoration;
- 5. General Forest, Rangeland, and Grassland.

Idaho's Roadless Areas (9,304,300 acres)1 **Most Restrictive** Least Restrictive **Management Direction** Special General Areas of Wild Land Backcountry / Forest, Historic and Primitive Recreation Rangeland, Restoration Tribal Grassland 1,652,800 Significance 1,378,000 5,258,700 609,600 70,700 **Roadless Character Higher Quality** Lower Quality

Figure 1 - Management Categories of Idaho Roadless Areas

1 334,500 acres of forest plan special areas will be managed in accordance with applicable current and future forest plans

Resource Indicators for IRAs (Montana and Idaho).

Affects to the Roadless Areas are evaluated against the areas roadless values. The nine inventoried roadless area values used in analysis are:

- 1. High quality or undisturbed soil, water, and air.
- 2. Sources of public drinking water.
- 3. Diversity of plant and animal communities.
- 4. Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land.
- 5. Primitive, semi-primitive non-motorized and semi-primitive motorized classes of dispersed recreation.
- 6. Reference landscapes.
- 7. Natural appearing landscapes with high scenic quality.
- 8. Traditional cultural properties and sacred sites.
- 9. Other locally identified unique characteristics.

Table 1 - Resource indicators and measures for assessing effects to Inventoried Roadless Values

Resource Element	Resource Indicator	<u>Measure</u> Improving, Stable or Degrading)	Used to address: P/N, or key issue?	Source (Forest plan S/G; law or policy, BMPs, etc.)?
Inventoried Roadless Areas	Soil, Water, and Air	Hydrology & Fuels Resource Report	Yes	Forest Plan, 36 CFR 294 Subparts B & C, & Endangered American
Idaho Roadless	Public Drinking Water	Hydrology Resource Report	Yes	Wilderness Act of 1978
Wild Land Recreation; Special Areas of Historic or Tribal Significance;	Diversity of plant and animal communities	Wildlife & Botany Resource Reports	Yes	
Primitive; Backcountry/Restoration;	Primitive, Semi- primitive recreation	Recreation Resource Report	Yes	
General Forest, Rangeland, and	Reference Landscapes	IRA Resource Report	No	
Grassland.	Natural Appearing Landscapes	Visuals Resource Report	Yes	
Or Montona Boadless	Traditional Cultural Properties	Heritage Resource Report	No	
Montana Roadless	Unique Characteristics	IRA Resource Report	No	

Methodology

The proposed actions are evaluated in relation to their effects on the two roadless areas that overlap with the BCRP area. Within the BCRP area, there are two Inventoried Roadless Areas (IRAs). The first is Katka Peak IRA (10,300 acres) which is located entirely within the state of Idaho and consists of 9,000 acres of the Backcountry IRA management theme and 1,300 acres of General Forest management theme. The Idaho Roadless Area Rule (36 CFR 294 Subpart C) provides overall guidance for this entire IRA. The roadless expanse, included in the analysis of impacts to this IRA, is the boundary of the Katka Peak IRA. It is bound by lands of mixed ownership (primarily private) and by existing roads. Refer to map in Appendix A.

The second IRA is Mt. Willard-Lake Estelle IRA (68,000 acres.). It is located within both Idaho and Montana. On the Idaho Panhandle National Forests (IPNF), Mt. Willard-Lake Estelle IRA consists of 33,600 acres of Backcountry and 1,400 acres of Forest Plan Special Area. The Forest Plan Special Area refers to the Hunt Girl Creek - Research Natural Area (RNA) located within the project boundary. On the Kootenai National Forest, 23,400 acres are located in Idaho and are considered Backcountry. The Idaho Roadless Area Rule provides guidance for all portions of this IRA found within the state of Idaho. The 9,600 acres that are located in the state of Montana would be managed according to the 2001 Roadless Area Conservation Rule (36 CFR 294 Subpart B, published at 66 fed Reg. 3244-3273). The roadless expanse in this case would be the northernmost boundary of the IRA extending down to the southern boundary of the Scotchman Peaks Recommended Wilderness. The roadless expanse extends from the western boundary of the Mt. Willard Lake Estelle IRA to the eastern most portions of the Willard -Lake Estelle IRA on the Kootenai National Forest. The Starry Goat project administered by the Three Rivers District on the Kootenai National Forest is also proposing to conduct about 5,870 acres of no harvest/ prescribed burning only in IRAs located in the adjacent Callahan Creek drainages. For maps and details, please refer to the Starry Goat project on the KNF website at https://www.fs.usda.gov/project/?project=49837

9

The analysis discloses potential effects to the roadless character & wilderness attributes in order to determine if, or to what extent these effects might influence future consideration for wilderness recommendations. This analysis focuses on the potential effects on roadless characteristics as defined in the Idaho Roadless Rule and wilderness attributes as defined in the 1964 Wilderness Act and Forest Service Handbook (FSH) 1909.12 (72.1).

The best available science used in the determination of the effects of reintroduction of prescribed fire into the IRAs was partially gleaned from the USDA Forest Service publication entitled, "An Ecologically Based Strategy for Fire and Fuels Management in National Forest Roadless Areas" written by Dominick A. DellaSala and Evan Frost. In which, a case for prescribed Fire in Roadless Areas is compiled from over ninety separate publications. Please refer to

http://www.fusee.org/resources/Documents/fire_mgmt_roadless.pdf.

Table 2 shows the crosswalk or relationship between the wilderness attributes identified in Forest Service Handbook 1909.12 and the roadless area characteristics defined in the Idaho Roadless Rule.

Wilderness Attributes	Roadless Characteristic
Natural: Extent to which the area's ecological systems are substantially free from the effects of modern civilization and generally appear to have been affected primarily by forces of nature.	High quality or undisturbed soil, water, and air; Sources of public drinking water; Diversity of plant and animal communities; Habitat for threatened, endangered, proposed, candidate, and for sensitive species dependent on large, undisturbed areas of land.
Undeveloped: Degree to which the area is without permanent improvements or human habitation.	Reference landscapes; Natural appearing landscapes with high scenic quality.
Solitude and Primitive Recreation: Personal subjective value defined as the isolation from the sights, sounds, and presence of others and the developments of man	Primitive, semi-primitive non-motorized, semi- primitive motorized ROS classes of dispersed recreation.
Special Features: Unique and/or special geological, biological, ecological, cultural, or scenic features.	Traditional cultural properties and sacred sites; Other locally identified unique characteristics.
Manageability/boundaries: Ability to manage a roadless area to meet the minimum size criteria (5,000 acres) for wilderness.	No criteria

Information Sources

Descriptions of roadless areas include first-hand knowledge of the area, information from the 2015 IPNF Forest Plan (including Appendix C – Wilderness Evaluation), and information from the Roadless Area Conservation FEIS for National Forest System Lands in Idaho (2008). Effects to the Wilderness Attributes and Roadless Characteristic are determined through the professional judgement and the review of the specialist's reports of the other disciplines within the Interdisciplinary Team (ID team). For example, the effects to the diversity of animal communities and habitat for threatened, endangered,

proposed, candidate, and for sensitive species dependent on large, undisturbed areas of land is primarily gleaned from working with the wildlife staff assigned to the ID team.

Incomplete and Unavailable Information

The Idaho Roadless Rule (36 CFR 294 Subpart C) describes the resource indicators for roadless characteristics in differing ways than the nine inventoried roadless area values used in analysis. For the sake of accurately communicating the information provided by the Idaho Roadless Rule, the indicators used in the roadless rule are used for the description of the existing condition within this report. Any incomplete and unavailable information on the nine inventoried roadless values not listed were not available through the descriptions found the Idaho Roadless Rule. No other known incomplete or unavailable information exists pertinent to the analysis of the potential impacts to the Inventoried Roadless Areas found within the project area.

Spatial and Temporal Context for Effects Analysis

The spatial boundary used for the analysis (direct, indirect and cumulative) of the Inventoried Roadless Area (IRA) related resources is the boundaries of both the Katka Peak (#157) and the Mt. Willard-Lake Estelle IRA and the unroaded lands contiguous to the roadless areas. Inventory criteria was utilized from FSH 1909.12 71.1 to determine if the unroaded lands contiguous to a roadless area meets the inventory criteria. If the lands meet the inventory criteria then the bounds of analysis is the entire roadless area expanse, that is, the un-inventoried lands contiguous to roadless area, in addition to the roadless area.

The temporal scope of the analysis is limited to the 25 to 30 years following harvest activities. This time period is the length of time openings created by regeneration harvest are likely to be evident given the growing conditions of the area. The timeframe considered for short term effects would be 5 to 10 years as the activities being proposed would likely be implemented within that timeframe. Long term effects would be those that persisted longer than 10 years.

Affected Environment

Existing Condition

Within the project area two Inventoried Roadless Areas (IRA) exist. The first, is Katka Peak IRA (10,300 acres). Located entirely within the state of Idaho, Katka Peak consists of 9,000 acres of the IRA management theme Backcountry and 1,300 acres of General Forest. The Idaho Roadless Area Rule (36 CFR 294 Subpart C) provides overall guidance for this entire IRA. The roadless expanse included in the analysis of impacts to this IRA <u>is</u> the boundary of the Katka Peak IRA. It is bound by lands of mixed ownership (primarily private) and by existing roads.

The second IRA is Mt. Willard-Lake Estelle IRA (68,000 Acres Total). It is located within both the states of Idaho and Montana. On the Idaho Panhandle National Forest, Mt. Willard-Lake Estelle IRA consists of 33,600 of Backcountry and 1,400 acres of Forest Plan Special Area. In this case, the Forest Plan Special Area refers to the Hunt Girl Creek - Research Natural Area (RNA) located within the project boundary. On the Kootenai National 23,400 Acres are located in Idaho and are considered Backcountry. The Idaho Roadless Area Rule provides guidance for all portions of this IRA found within the state of Idaho. Approximately 9,600 acres are located in the state of Montana and would be managed according to the 2001 Roadless Area Conservation Rule (36 CFR 294 Subpart B, published at 66 fed Reg. 3244-3273). The roadless expanse in this case would be the norther most boundary of the IRA extending down to the southern boundary of the Scotchman Peaks Recommended Wilderness. The roadless expanse extends from the western boundary of the Mt. Willard Lake Estelle IRA to the Eastern most portions of the Willard Estelle IRA on the Kootenai National Forest.

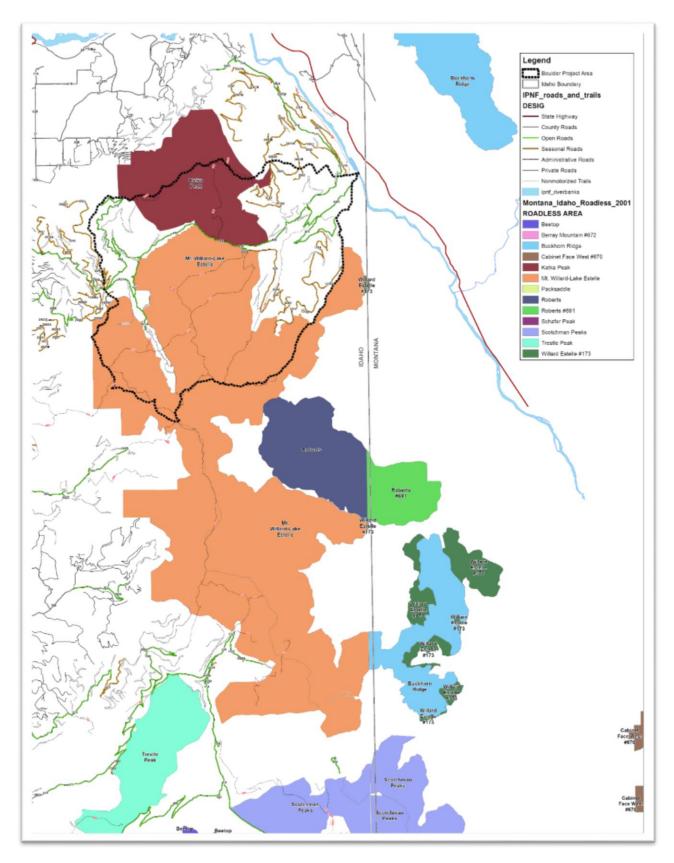


Figure 2 – Map of Inventoried Roadless Areas as they relate to the Project Area

Existing Condition (Katka Peak IRA)

Katka Peak Roadless Area is located five miles southeast of Bonners Ferry. It is within Boundary County on the Bonners Ferry Ranger District of the Idaho Panhandle National Forest. Access can be gained from U.S. 95 via Twenty Mile Road, a maintained, unsurfaced road. This roadless area is part of a northeast-southwest ridge and associated side drainages. Slopes to the northwest are very steep; southeast slopes are more moderate. Several southeast-bearing side ridges are also found. Most drainages are only partially within the roadless area.



Figure 3 - Clifty Mountain located within the Katka Peak IRA

Lower elevations support cedar, hemlock and white pine, with subalpine fir common at high elevations. The Katka Peak Roadless Area is quite visible from Bonners Ferry. Current recreation use is moderate; hikers use the trail to Katka Peak and hunters use the area in the fall.

Table 2 - Katka Peak IRA Management Classification

IRA Name & #	Idaho Roadless Rule Management Classification(s)	Acres in Idaho 2008 Idaho Roadless Rule	Acres in Montana 2001 Roadless Area Conservation Rule
Katka Peak (#157)	Backcountry/Restoration – 9,000 acres.	Approximately 10,300 acres	0 acres
	General Forest – 1,300 acres.		

Wilderness Attributes - Katka Peak IRA

Natural:

Man's activities in this roadless area have been minor, limited primarily to pack trails constructed for fire control purposes. There are no communities or municipal water supply systems within or adjacent to the <u>Backcountry portion</u> of this roadless area, therefore no roads could be constructed to facilitate fuel reduction projects. In addition, since there are no communities or municipal water supply systems nearby, no timber harvest or associated road building would occur for the purpose of reducing the significant risk of wildland fire effects.

Mingan moonwort (Botrychium minganense) a sensitive plant species occurs in this roadless area. Besides the normal complement of animals found in northern Idaho, this area contains identified grizzly bear habitat. Part of this area may be used by a locally known elk herd. Columbia spotted frog, Coeur d'Alene salamander, and western toad habitat overlaps this roadless area. Westslope cutthroat habitat overlaps this roadless area. Core Grizzly habitat also exists within this roadless area and Bull trout habitat exists.

Undeveloped:

Much of the boundary is mid-slope, defined only by where development has stopped. These boundaries would be hard to manage over time. In these cases, better defined and more manageable boundaries do not exist. Continued intensive management along these boundaries would interfere with the natural appearance and ability to find solitude in the area. Management activities should be consistent with the Scenic Integrity Objective of Moderate to High.

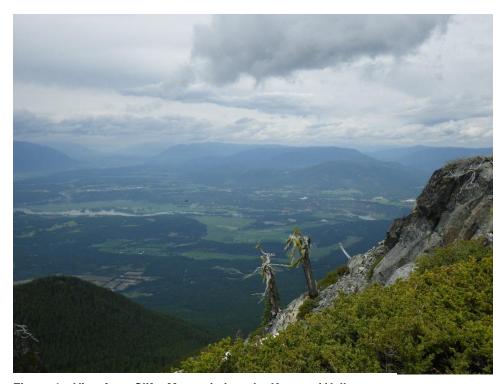


Figure 4 – View from Clifty Mountain into the Kootenai Valley

Solitude and Primitive Recreation:

This area has moderate to high opportunities to find solitude. Approximately half of the boundary is formed by roads or timber harvest areas, and activities near here will generally be heard and seen. In other areas, though, the topography adequately screens out nearby activities. This area offers hunting, hiking, horseback riding, mountain biking, and berry picking. Clifty Mountain offers spectacular vistas, almost all of which include development and land use by man. Trail #182 (Clifty Mountain Trail) follow the ridge between Clifty and Katka mountains provides a classic high elevation hike with little evidence of human habitation.

Special Features:

Cultural resource potential for prehistoric sites is considered low, based on surveys done in similar areas. Bedrock geology consists of quartzites and argillites of the Prichard formation. Ten percent of the area has a high mineral potential and this is where most of the activity in the area is found. The remaining 90 percent has a moderate potential. There are 21 mining claims in the area. There has been a small amount of past production from veins associated with the sills to the north of the subject area, and mineral occurrences in the area appear to also be associated with these sills. The potential for oil and gas is rated low due to lack of information. This roadless area contains 10,300 acres of low geothermal potential. No new leasable mineral activity is expected under the Backcountry or GFRG theme since roads are not permitted to access new mineral leases. The GFRG exception for road building for phosphate leases is not relevant since there is no potential phosphate present in this roadless area.

Manageability:

Annual fire occurrence is low however; northern Idaho ecosystems are subject to periodic large fires. Activities away from roads would likely be in the form of prescribed fire or wildland fire use. Any such projects would be designed to maintain or improve roadless characteristics over the long-term.

About 9,100 acres have been classed as tentatively suitable for timber production. The presence of mature timber increases the near term value of this area. Timber cutting from existing roads or using aerial systems could be done throughout all 9,000 acres of Backcountry to improve TEPS habitat or ecosystem composition and function, provided that these activities maintain or improve at least one roadless characteristic.

Roadless Characteristics - Katka Peak IRA

Natural Integrity:

Man's activities in this roadless area have been minor, limited primarily to pack trails constructed for fire control purposes.

Undeveloped Character:

Much of this area has adequate topographic and/or vegetative screening to keep human activities from outside the area from impinging on the natural feeling of the area. The upper slopes of Clifty Mountain are so steep, however, that the Kootenai Valley with all its developments seems to be right at hand.

Opportunities for Experience:

This area has moderate to high opportunities to find solitude. Approximately half of the boundary is formed by roads or timber harvest areas, and activities near here will generally be heard and seen. In other areas, though, the topography adequately screens out nearby activities. This area offers hunting, hiking,

horseback riding, and berry picking. Clifty Mountain offers spectacular vistas, almost all of which include development and land use by man.

Special Features:

Clifty Mountain is probably the single most prominent feature.

Manageability:

Much of the boundary is mid-slope, defined only by where development has stopped. These boundaries would be hard to manage over time. In these cases, better defined and more manageable boundaries do not exist. Continued intensive management along these boundaries would interfere with the natural appearance and ability to find solitude in the area.

Fisheries:

Bull trout, sturgeon, burbot, inland redband trout, and westslope cutthroat habitat overlaps this roadless area.

Wildlife:

Besides the normal complement of animals found in northern Idaho, this area contains identified grizzly bear habitat. Part of this area may be used by a locally known elk herd. Columbia spotted frog, Coeur d'Alene salamander, and western toad habitat overlaps this roadless area.

Botanical:

Mingan moonwort (Botrychium minganense) a sensitive plant species occurs in this roadless area.

Recreation:

Big game hunting and day hikes along the Clifty Mountain vistas are the major uses of this area. Current use is light the lack of major attractions indicates future use at about current levels.

Timber:

About 9,100 acres have been classed as tentatively suitable. The presence of mature timber increases the near term value of this area.

Minerals and Energy:

Bedrock geology consists of quartzites and argillites of the Prichard formation. Ten percent of the area has a high mineral potential and this is where most of the activity in the area is found.

The remaining 90 percent has a moderate potential. There are 21 mining claims in the area. There has been a small amount of past production from veins associated with the sills to the north of the subject area, and mineral occurrences in the area appear to also be associated with these sills. The potential for oil and gas is rated low due to lack of information. This roadless area contains 10,300 acres of low geothermal potential.

Disturbances:

Annual fire occurrence is low however; northern Idaho ecosystems are subject to periodic large fires.

Table 3 - Availability determination from the IPNF Revised Land management Plan (Katka Peak #157)

Resource Element	Resource Indicator	Measure	Existing Condition (IPNF Forest Plan, App C)
Inventoried Roadless Characteristics	Soil, Water, and Air	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
Characteriolics	Public Drinking Water	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Diversity of plant and animal communities	IPNF Forest Plan - Wilderness Evaluation (Availability)	Area identified as having a need for treatment in this Resource Category
	Primitive, Semi- primitive recreation	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Reference Landscapes	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Natural Appearing Landscapes	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Traditional Cultural Properties	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Unique Characteristics	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.

Existing Condition (Mt. Willard-Lake Estelle IRA)

35,000 Acres Idaho Panhandle (Idaho), 23,400 Acres Kootenai (Idaho), 9,600 Acres Kootenai (Montana) - 68,000 Acres Total

The Mt. Willard-Lake Estelle Roadless Area is located 13 miles northeast of Sandpoint, Idaho and nine miles southeast of Bonners Ferry, Idaho. The area is along the divide that separates the Kootenai and Idaho Panhandle National Forest. The majority of this roadless area lies in the Bonners Ferry and Sandpoint Ranger Districts of the Idaho Panhandle National Forest. The area runs north-south extending from North Creek in Boundary County to Benning Mountain in Bonner County. Of the 68,000 acres, approximately 58,400 acres are in Idaho. Access is provided by gravel roads in several drainages, particularly Raymond Creek, North Callahan Creek, Keeler Creek, Grouse Creek, and Boulder Creek, and high elevation access near Lunch Peak.



Figure 5 - Mt. Willard-Lake Estelle Roadless

Most of this area is high alpine forest type with interspersed rocky and grassy openings near the ridgetops. Diversity of vegetative types is most pronounced near the high elevation ridgetops. Forest types include mixed conifer stands common to northern Idaho in the lower elevations and alpine fir, lodgepole pine, and an occasional whitebark pine in the highest elevations.

Table 4 - Mt. Willard-Lake Estelle IRA Management Classification

IRA Name & #	Idaho Roadless Rule Management Classification(s)	Acres in Idaho 2008 Idaho Roadless Rule	Acres in Montana 2001 Roadless Area Conservation Rule
Mt. Willard-Lake Estelle (#173)	Backcountry/Restoration – 1,600 acres (CPZ) and 32,000 (Non-CPZ). Forest Plan Special Area – 1,400 acres.	Approx.35,000 acres (Idaho Panhandle NF) Approx. 23,400 acres (Kootenai NF)	Approx. 9,600 acres (Kootenai NF)

Wilderness Attributes – Mt. Willard-Lake Estelle IRA

Natural:

Man's activities in this roadless area have been minor, limited primarily to pack trails constructed for fire control purposes. Water quality in the area is naturally susceptible to erosion. The disintegrating granitic

rock and soil types found in this area make this area particularly prone to erosion and stream channel damage. The area contains five lakes with 50 acres of Lake Habitat. This roadless area contains 9,800 acres of surface water (municipal water supply). 1,600 Backcountry acres are located within the CPZ where timber cutting for hazardous fuel removal could be allowed. The project area does not include the CPZ or municipal water supply.

Lance-leaved moonwort (Botrychium lanceolatum var. lanceolatum) and Mingan moonwort (Botrychium minganense) two sensitive plant species occur in this roadless area. There are patches of old-growth timber stands which have escaped the early 1900 forest fires. Animal species include elk, moose, black bear, whitetail deer, mule deer and grouse. This roadless area has a significant amount of habitat for the threatened grizzly bear. Wolverine, fisher, Columbia spotted frog, Coeur d'Alene salamander, and western toad habitat overlaps this roadless area. Core Grizzly habitat also exists within this roadless area and Bull trout habitat exists. The local population considers the roadless area as good bear country.

Solitude and Primitive Recreation:

This area offers an opportunity for recreational activities around high mountain lakes. Topography within this roadless area is not unique to northern Idaho. This area offers the opportunities for beginners to advanced backpackers. Much of the terrain below the main divide has poor trail access. Hunting, fishing, camping, scenic viewing, hiking, and horseback riding are some of the recreational activities occurring within this roadless area.

The area possesses high opportunity for solitude because of its large size and diversity of topography. It possesses diversity in vegetation because of substantial difference in elevations. From the ridge trail (#176), any evidence of modern development seem quit distant with the diversity in elevations, people are not normally concentrated in one area. The divide which is near the Montana-Idaho border attracts people because of its relatively high mountain peaks and vistas. The mountain lakes concentrate people because of the water attraction and fishery values. The periphery of this area can be accessed by numerous roads. The sounds from logging activity and roads near the periphery of the area have the potential of penetrating upwards into the roadless area.

Nearly all of the trails that access the Idaho half of the IRA have been improved and represent a substantial investment from multiple cooperating agencies. The staging areas and trailhead located along the periphery of the IRA have also been improved. The trails to existing lakes are maintained and receive use by backpackers and fishermen. This heavy use has caused some vegetative resource damage around the mountain lakes.

Undeveloped:

The Mt. Willard-Lake Estelle Roadless Area is long and narrow. It follows a ridge which is a watershed divide between the Pend Oreille and Kootenai River watersheds. Average width is four miles and length is approximately 14 miles. The highest peak is Mt. Pend Oreille, with an elevation of 6,755 feet. The lowest elevation within this roadless area is approximately 3,500 feet. The land was shaped by both continental and alpine glaciation. Six mountain lakes are included within this area. The disintegrating granitic rock and soil types found in this area make this area particularly prone to erosion and stream channel damage. Development along the boundaries has created irregular boundaries.



Figure 6 - Boulder Meadows

Special Features:

The Idaho Panhandle National Forest has not been surveyed for cultural resources but surveys in similar areas on the Kootenai National Forest indicate low probabilities of discovery of cultural sites. The local population considers the roadless area as good bear country. The area contains grizzly bear habitat. There are patches of old-growth timber stands which have escaped the early 1900 forest fires. The 1,400 acre Hunt Girl Creek Research Natural Area is located in the northwest quarter of this area.

Manageability:

This roadless area is a long, narrow roadless area. Boundaries are not well defined on major terrain or other features. Boundaries generally contour along steep hillsides to avoid roads and logging activities which are on the lower slopes. This roadless area has considerable variation in width along its long axis. The area becomes narrow at the headwaters of major drainages. Most of these drainages have road development or private lands up close to the main divide. Private lands are also incorporated within this roadless area boundary.

Roadless Characteristics - Mt. Willard-Lake Estelle IRA

Natural Integrity:

Impacts from human activity in this area have been relatively minor. In the past, some hardrock mining exploration occurred, but evidence of these diggings has been reduced substantially by weathering processes. The Dougherty Mine is a well-known mine located east of Mt. Pend Oreille and north of Lake Darling. Trails that are not maintained quickly become overgrown with trees and shrubs. The trails to existing lakes are maintained and receive use by backpackers and fishermen. This heavy use has caused some vegetative resource damage around the mountain lakes.

Opportunities for Experience:

Since the area is narrow and encompasses a high ridge, people visiting can frequently view human activities and development near the periphery of this roadless area. Roads, timber harvest areas, and activities along Lake Pend Oreille are some of the activities viewed from this area.

The area possesses high opportunity for solitude because of its large size and diversity of topography. Some areas, such as the ridgetop trail, do offer views of man's activities. It possesses diversity in vegetation because of substantial difference in elevations. With the diversity in elevations, people are not normally concentrated in one area. The divide which is near the Montana-Idaho border attracts people because of its relatively high mountain peaks and vistas. The mountain lakes concentrate people because of the water attraction and fishery values. The periphery of this area can be accessed by numerous roads. The sounds from logging activity and roads near the periphery of the area have the potential of penetrating upwards into the roadless area.

Special Features:

The local population considers the roadless area as good bear country. The area contains grizzly bear habitat. There are patches of old-growth timber stands which have escaped the early 1900 forest fires. The 1,400 acre Hunt Girl Creek Research Natural Area is located in the Northwest quarter of this area. The hiking experience on a trail along a long, unbroken alpine ridge, with views of the Pend Oreille Lake region, is the area's special feature.

Manageability:

This roadless area is a long, narrow roadless area. Boundaries are not well defined on major terrain or other features. Boundaries generally contour along steep hillsides to avoid roads and logging activities which are on the lower slopes. This roadless area has considerable variation in width along its long axis. The area becomes narrow at the headwaters of major drainages. Most of these drainages have road development or private lands up close to the main divide. Private lands are also incorporated within this roadless area boundary.

Fisheries:

A rare remnant population of pure strain native rainbow trout exists in the upper drainages of the Kootenai National Forest portion. Bull trout, sturgeon, burbot, inland redband trout, and westslope cutthroat habitat overlaps this roadless area.

Wildlife:

Species include elk, moose, black bear, whitetail deer, mule deer and grouse. This roadless has a significant amount of habitat for the threatened grizzly bear. Wolverine, fisher, Columbia spotted frog, Coeur d'Alene salamander, and western toad habitat overlaps this roadless area.

Water:

Water quality in the area is naturally susceptible to erosion. The disintegrating granitic rock and soil types found in this area make this area particularly prone to erosion and stream channel damage. The area contains five lakes with 50 acres of lake habitat. This roadless area contains 9,800 acres of surface water (municipal water supply).

Botanical:

Lance-leaved moonwort (Botrychium lanceolatum var. lanceolatum) and Mingan moonwort (Botrychium minganense) two sensitive plant species occur in this roadless area.

Recreation:

This area offers an opportunity for recreational activities around high mountain lakes. Topography within this roadless area is not unique to northern Idaho. Since this area is quite narrow it offers moderate challenges to the more experienced backpacker. Much of the terrain below the main divide has poor trail access. Hunting, fishing, camping, scenic viewing, hiking, and horseback riding are some of the recreational activities occurring within this roadless area.

Timber:

The roadless area has about 27,000 acres of suitable timber with a standing volume of 537 million board feet. Suitable lands are along the lower elevations and in most cases, could be efficiently managed for timber. Portions of these suitable lands support old-growth, higher risk timber stands. Access to these stands can be gained by the extension of existing timber harvest roads in the immediate lower elevations.

Range:

Sheep grazed this area prior to the 1960s; however, there are no sheep or cattle allotments at this time.

Minerals and Energy:

All of the area has a medium mineral potential. There are several known mineral occurrences in the area, all of which are associated with the sills. Glacial deposits are fairly extensive in the area, making exploration difficult. There are presently 12 unpatented mining claims. The potential for oil and gas is low due to lack of information. This roadless area contains 35,000 acres of low geothermal potential.

Landownership and Special Uses:

There are private lands incorporated within the roadless area boundary.

Heritage:

The Idaho Panhandle National Forest has not been surveyed for cultural resources but surveys in similar areas on the Kootenai National Forest indicate low probabilities of discovery of cultural sites.

Disturbances:

Although large fires occurred in the area in the early 1900s, the number of fires occurring annually is low.

Table 5 - Resource indicators and measures for the existing condition (Mt. Willard-Lake Estelle #173)

Resource Element	Resource Indicator	Measure	Existing Condition (IPNF Forest Plan, App C)
Inventoried Roadless Characteristics	Soil, Water, and Air	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
Characteristics	Public Drinking Water	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Diversity of plant and animal communities	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Primitive, Semi- primitive recreation	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.

	Unique Characteristics	IPNF Forest Plan - Wilderness Evaluation (Availability)	* Area identified as having a need for treatment in this Resource Category
	Traditional Cultural Properties	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Natural Appearing Landscapes	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.
	Reference Landscapes	IPNF Forest Plan - Wilderness Evaluation (Availability)	Areas has little to no need of treatments.

^{*} Unique Characteristics refers the high value mineral deposits

Environmental Consequences (Direct and Indirect Effects)

Effects Common to Alternative 1 – (No Action) and Alternative 3 (No Activities in the Roadless Areas)

<u>Direct and indirect effects to the Wilderness Attributes of Katka Peak IRA and Mt. Willard Lake Estelle IRAs (Common to both Alt. 1 & Alt. 3)</u>

Effects to Natural Attribute of Katka Peak and Mt. Willard Lake Estelle IRAs

Alternatives 1 and 3 would support the Natural appearance of the IRA. Annual fire occurrence in the project area is low, however, all northern Idaho forested ecosystems are naturally subject to periodic wildfires. Fire records including the ignition location, size, and cause (i.e. human, lightning) have been kept since the early 1940s on the district, however, the region has been maintaining this information since 1970 and it is believed this 47 year period likely has the most complete and accurate information. Since 1970 there have been 49 fire starts within the Boulder project area, with another 4 ignitions occurring on the border of the project area and 9 starting within a half-mile. Had these fires not been successfully suppressed, some of them may have had the potential to burn large acreages dependent on weather and fuel conditions at that time. Due to active suppression efforts, natural fire has been mostly absent from the landscape for 107 years.

Under alternatives 1 and 3, processes including insect and disease activity would continue to occur and vegetation composition and structure would change over time through natural growth, mortality, and events such as wildfires, and wind throw. This cycle may cause an accumulation of fine fuels, and once dead trees fall, they contribute to large woody debris that may persist for years. Severity to forest resources can be a concern where large woody debris is high due to increased flame lengths and prolonged smoldering of the larger fuels – severe surface fire can result in further tree mortality and damage to soils due to deep heat transfer. Crowning out, spotting, and torching are also greater where heavy fuels have built-up on the forest floor (see the 'Existing Condition' section of the fire and fuels resource report). For additional information on fuels and fire effects to other resources, please refer to the respective resource reports.

Effects to the Undeveloped Attribute of the IRAs

The undeveloped character of the IRAs would not be directly affected by alternatives 1 and 3. These alternatives would not impair the ability of the area to be used as a reference landscape or adversely affect the high scenic quality of these areas. Indirectly, alternatives 1 and 3 could result in an increased likelihood of large scale, high severity wildfire(s) when compared to alternative 2. Please see the fire and fuels report for a more detailed description of the potential effect of the fire resource.

Effects to the Solitude and Primitive Recreation Attribute of the IRAs

Alternatives 1 and 3 would have no direct effect on opportunities for primitive and semi-primitive recreation because no activities are planned in the IRAs. Indirectly though, by taking no action the likelihood of a stand replacing type fire may be greater over time. If a large scale, high intensity wildfire were to occur in the IRA(s), the character of the area could completely change from a lush forested environment to a blackened post fire area with heavy tree mortality. Depending on visitor's values, the loss of a canopy cover could be considered a loss of solitude. Furthermore, unsafe post fire conditions could necessitate area closures which in turn could be considered a temporary loss of primitive recreational opportunities.

Effects to the Special Features of the IRAs

Alternatives 1 and 3 would have no direct effect on Special Features because no actions are being proposed within the IRAs. There could be indirect impacts of not treating accumulated forest fuels if large scale wildfires were to occur. Such fires could extirpate documented occurrences or undetected rare moonworts and other rare plants in the project area, particularly those associated with moist forest and cold forest habitats. These rare plants would be considered special features of the IRAs. Please see the rare plants resource analysis for additional information.

Effects to the Manageability Attribute of the IRAs

Actions proposed under alternatives 1 and 3 would not affect the "manageability" attribute of the IRAs. Nothing proposed would detract from the Forest Service's ability to maintain the IRA's wilderness attributes and/or meet the minimum size criteria (5,000 acres) for wilderness.

Resource Element	Resource Indicator	Measure Improving, Stable or Degrading)	Key Issue
Wilderness Attributes	Natural	Stable	Yes
	Undeveloped	Stable	Yes
	Solitude and Primitive Recreation	Stable	Yes
	Special Features	Stable	No
	Manageability (as Wilderness)	Stable	No
Will the altern	No		

Direct and indirect effects to the Inventoried Roadless Area Characteristics of Katka Peak IRA and Mt. Willard Lake Estelle IRAs (Common to both Alt. 1 & Alt. 3)

Inventoried Roadless Area Characteristics

Soil, water and air resources:

As a direct effect, the no action alternative should support the soil, water and air resources. However, indirectly (under the no action alt.) we could see greater impacts to the area due to an increased likelihood of sever wildfires due to prior fire suppression efforts.

Diversity of plant and animal communities:

The no action alternative should have no effect on the diversity of plant and animal communities. More technical analysis can be found in the sensitive plant species specialist and wildlife reports.

Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land:

The no action alternative should have no adverse effects on the habitat for T&E, proposed candidate, and sensitive plant and animal species. More specific analysis can be found in the wildlife and botany specialist reports.

Primitive, semi-primitive non-motorized and semi-primitive motorized classes of dispersed recreation:

The no action alternative should have no direct effect on opportunities for primitive and semi-primitive recreation. Indirectly though, by taking no action the likelihood of a stand replacing type fire may be greater.

Reference landscapes:

The no action alternative would have no adverse impact on the area as a reference landscape.

Natural appearing landscapes with high scenic quality:

If the no action alternative is selected there should be no immediate effect to the scenery resources of the project area. In the event of a wildfire, the impacts to the overall landscape character should be greater under the no action alternative because of an increased likelihood of a high severity fire.

Traditional cultural properties and sacred sites:

If the No Action Alternative is selected there should be no immediate effect to cultural resources of the project area. A more detailed analysis can be found in the heritage specialist report.

Other locally identified unique characteristics:

No other locally identified unique characteristics were identified by the interdisciplinary team or the public.

Alternative 2 – (Burn Units Only in Inventoried Roadless Areas)

Project Design Features and Mitigation Measures

Measures to protect the Natural Wilderness Attribute and corresponding Roadless Characteristics (High quality or undisturbed soil, water, and air; Sources of public drinking water; Diversity of plant and animal communities; Habitat for threatened, endangered, proposed, candidate, and for sensitive species dependent on large, undisturbed areas of land.).

- 1. Measures to Protect Soils.
- 2. Measures to Protect Hydrologic Resources and Fish Habitat.
- 3. Measures to Protect Rare Plants (Threatened, Endangered, and Sensitive Plant Species).
- 4. Measures to Protect Wildlife and Wildlife Habitat.

Measures to protect the Undeveloped Wilderness Attribute and corresponding Roadless Characteristics (Reference landscapes; Natural appearing landscapes with high scenic quality.).

1. Measures to Maintain Scenic Resources.

Measures to protect the Solitude and Primitive Recreation Wilderness Attribute and corresponding Roadless Characteristics (Primitive, semi-primitive non-motorized, semi-primitive motorized ROS classes of dispersed recreation.).

1. Measures to Protect Trails and Recreation Use.

Measures to protect the Special Features Wilderness Attribute and corresponding Roadless Characteristics (Traditional cultural properties and sacred sites; other locally identified unique characteristics.).

- 1. Measures to Protect Cultural Resources (National Register of Historic Places Eligible Sites and Traditional Cultural Properties).
- 2. Measures to Protect Rare Plants (Threatened, Endangered, and Sensitive Plant Species).
- 3. Measures to Protect Wildlife and Wildlife Habitat.

<u>Direct and indirect effects to the Wilderness Attributes of Katka Peak IRA and Mt. Willard Lake Estelle IRAs (Alternative 2 – Burn Units in IRAs)</u>

Table 7 - Management Activities Proposed Under Alt. 2 in Katka Peak IRA

IRA Name, # and Size	Idaho Roadless Rule Management Classification(s)	Pre-commercial Thin feller buncher, tractor and skyline logging	Regen Heli Logging hand felling, helicopter yarding	Prescribed burn units
Katka Peak (#157) Approximately 10,300 Acres in	Backcountry/Restoration – 9,000 acres.	0 acres	0 acres	2157 acres
Idaho	General Forest – 1,300 acres. Including CPZ and Municipal Watershed	0 acres	0 acres	0 acres

Table 8 - Management Activities Proposed Under Alt. 2 in Mt. Willard Lake Estelle

IRA Name, # and Size	Idaho Roadless Rule Management Classification(s)	Pre-commercial Thin feller buncher, tractor and skyline logging	Regen Heli Logging hand felling, helicopter yarding	Prescribed burn units
Mt. Willard- Lake Estelle (#173)	Backcountry/Restoration – 1,600 acres (CPZ) and 32,000 (Non-CPZ).	0 acres	0 acres	4880 acres
68,000 Acres Total	Forest Plan Special Area – 1,400 acres. (Hunt Girl RNA).	0 acres	0 acres	0 acres

Natural

The reintroduction of fire to an ecosystem where fire suppression activities have likely reduced the acres of forest that would have burned had natural ignitions run their course, would have positive effects to the Natural quality of the IRAs because the prescribed burning would help to restore the ecosystem using natural processes. The prescribed burning could also result in a short term impacts to recreation users from smoke but would enhance the ecosystem in the long term. Please see the fire and fuels report for more details.

Positive impacts include the restoration of the whitebark pine communities which enhances the Natural quality of the IRAs. The need for the whitebark pine restoration is directly linked to the human-induced changes associated with the introduction of the invasive blister rust fungus. Please see the vegetation report for further information. The reintroduction of fire could also result in an increase in browse and forage for big game. Overall, the proposed activities would have a short term adverse effects with a long term beneficial effects to the Natural quality of the IRAs. Please refer to the wildlife, fisheries, and vegetation section of this document for more information.

Undeveloped

Impacts to the undeveloped character of the IRAs could include evidence of Forest Service management activities in the form of chainsaw use (cut stumps of saplings) and evidence of prescribed fire activities. Proposed activities in dry site old growth stands would include slashing of ladder fuels in the stands to minimize old growth tree mortality during prescribed burning activities. Along Trail #143, the small stumps from the slashing operation are expected to burn, rot and disintegrate within about 10 years. The linear-shaped recreation trails found within the area could act as a fire line and result in a linear edge to a burned area. These impacts would occur only as long as the burned area was noticeable, which is about two years for grasses and shrubs to resprout and blur the contrast of the fires edge on the trail. In contrast to alternative 1, the undeveloped character of the area would be altered to a greater degree if a large scale, high severity fire were to occur and suppression tactics using miles of fireline were implemented.

Solitude and Primitive Recreation

Impacts include the short term loss of opportunities for solitude and/or a primitive and unconfined type of recreational experiences during prescribed burning operations. During project implementation, the use of chainsaws for slashing saplings in the old growth stands could contribute to loss of a feeling of solitude. Temporary area closures while fire crews are working could be also be interpreted as a loss of primitive recreational opportunities. These short term impacts may be outweighed by the long term benefits associated with a reduced risk of severe fire(s). Overall, under this alternative, the remoteness and solitude of the IRAs would remain unchanged. Conversely, if large scale high intensity and high severity wildfires were to occur in one or more of the IRAs, the loss of solitude and primitive recreational opportunities may occur for a longer period of time due to unsafe post fire trail conditions and prolonged closures needed for the public safety.

Public activities including mushroom gathering, firewood cutting, driving roads, camping, snowmobiling, hunting, hiking, berry picking may occur in areas disturbed by activities proposed under alternative 2. In particular, larger openings in the forest canopy may create additional opportunities for berry picking. The prescribed burning operations may also create additional opportunities for mushroom gathering.

Special Features

Core grizzly habitat is a special biological feature of both IRAs. Prescribed burning activities proposed in alternative 2 would result in minor impacts to grizzly habitat during project implementation and long term

positive effects (increasing browse and forage) upon project completion. Please see the wildlife specialist report for additional information.

Another positive impact would be the restoration of the whitebark pine communities which are also considered a special feature of the IRA. The prescribed burning operations are designed in part to open up areas for white bark pine to regenerate in. The need for the whitebark pine restoration is directly linked to the human-induced changes associated with the introduction of the invasive blister rust fungus. Please see the vegetation report for further information.

Manageability

Actions proposed under alternatives 1, 2 and 3 would not affect the "manageability" attribute of the IRAs. Nothing proposed would detract from the Forest Service's ability to maintain the IRA's wilderness attributes and/or meet the minimum size criteria (5,000 acres) for wilderness.

Table 9 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)

Resource Element	Resource Indicator	Measure Improving, Stable or Degrading)	Key Issue
Wilderness Attributes	Natural	Overall Improving	Yes
	Undeveloped	Overall Improving	Yes
	Primitive and Unconfined Recreation	Stable	Yes
	Special Features	Stable	No
	Manageability (as Wilderness)	Stable	No
Will the alterr	No		

<u>Direct and indirect effects to the Inventoried Roadless Area Characteristics of Katka</u> <u>Peak IRA and Mt. Willard Lake Estelle IRAs (Alternative 2 – Burn Units in IRAs)</u>

Soil, water and air resources:

The proposed prescribe burning activities should reduce the likelihood of a stand replacing fire and the associated impacts to the soil and water resources found in the IRA.

Diversity of plant and animal communities:

The proposed activities should have a positive (improving) effect on the roadless characteristic associated with the diversity of plant and animal communities. It should directly improve the White Bark Pine (USFS, Region 1 Sensitive Plant Species) communities and lower the risk of a stand replacing wildfire. Please review the botany & wildlife specialist report for more information.

Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land:

The prescribed burn units should improve browse and forage habitat for grizzlies, deer, elk and moose. Burn units would reduce conifer encroachment in existing shrubfields revitalizing decadent brush (reducing shrub height and stimulating new growth). Prescribed burning activities would also improve the quality and quantity of grass and herbaceous forage and potentially increasing long-term berry production (particularly huckleberry and mountain ash) in summer and fall. Reduction of overstory cover would allow more sunlight to penetrate and rejuvenation decadent shrubs. Please refer to the wildlife section of this report for me information. It should also directly benefit the white bark pine (USFS,

Region 1 Sensitive Plant Species) communities by lower the risk of a stand replacing wildfire. Please review the botany report for additional information.

Primitive, semi-primitive non-motorized and semi-primitive motorized classes of dispersed recreation:

The proposed management activities could have a short term negative affect on the semi-primitive recreational opportunities in the IRA (and associated roadless expanse). Impacts to the backcountry recreation opportunities found in areas where management activities occur could include the sights and sounds of helicopter use, a displacement of recreational traffic to areas not affected by fire activities, the sights and sounds of chainsaw use and the temporary closure of trails found within the IRAs during burning activates.

These short term impacts may be outweighed by the long term benefits associated with a reduced risk of catastrophic stand replacing fire caused by excessive fuel loading due to past suppression activities. If a large scale high intensity wildfire fire were to occur in the IRA (and associated roadless expanse) the loss of backcountry and semi-primitive recreational opportunities may occur for a longer period of time due to unsafe post fire trail conditions and prolonged closures needed for the public safety.

Incidental timber cutting may take place in stands containing ponderosa pine prior to prescribed burning to provide protection for these desirable trees. Snags and hazard trees may be cut if they are determined to be a safety concern. These activities would occur in areas at high elevations (>5,000') in rough terrain with no road access. Cut trees would be left on site. Cutting trees is permissible in Idaho Roadless Areas designated as Backcountry/Restoration where it is incidental to the implementation of a management activity not otherwise prohibited by subpart 294.24(c)(vii).

Reference landscapes:

The area has had moderate fire occurrences in the past. The fuels situation is predominately dense conifer with downed woody materials as ground fuels on the lower slopes and light ground fuels on the upper slopes and barren ridges.

Natural appearing landscapes with high scenic quality:

Currently, signs of past fire and subsequent grazing and salvage harvest are visible. The proposed prescribed burn units would be consistent with the existing scenic integrity. The reintroduction of natural appearing low intensity wildfire scars on the landscape would blend with the existing reference landscape. Please refer to the Scenery section of this document.

Traditional cultural properties and sacred sites:

The action alternatives should have no adverse impacts on the areas traditional cultural properties and sacred sites. Please see the heritage section of this document for a more detailed analysis.

Other locally identified unique characteristics:

The action alternative should have no adverse impact on other locally identified unique characteristics.

Cumulative Effects – Alternative 2 (Burn Units Only in Inventoried Roadless Areas)

Past, Present, and Reasonably Foreseeable Activities Relevant to Cumulative Effects Analysis

<u>Cumulative Effects to the Wilderness Attributes of Katka Peak IRA and Mt. Willard Lake Estelle IRAs (Alternative 2 – Burn Units in IRAs)</u>

Natural:

Under the adjacent Starry Goat Project (Kootenai National Forest) the USDA Forest Service is proposing an additional 4054 acres of prescribed burning type activities within the Mt. Willard –Lake Estelle IRA. When combined with the 4880 acres of prescribed burning type activities proposed under alt 3 of this project, the cumulative effect would result in a larger portion of the IRA (13%) receiving the beneficial objectives of the burn units and more closely mimicking that of naturally occurring fires.

Continued fire suppression in the IRA's could result in encroachment of trees into existing openings, and the increased shade and competition would further reduce huckleberry, mountain ash and other forage components. Lack of fire in these areas reduces the release of nutrients into soils, could lead to higher fuel loadings for future wildfires, and negatively affects those plants and animals that are dependent on fire. Succession would play a large role with conifers re-establishing populations on post burned landscapes.

When combining continued fire suppression activities with actions proposed in Alternatives 1 and 3, no changes would occur to the increasing risk of future large scale high intensity fires. When considered in combination with the action proposed in alternative 2, cumulatively, future fires may be more naturally occurring in both intensity and severity if they burn in areas where fuels are reduced as a result of this project. Because there are no proposed harvest units, roads, or other reasonably foreseeable actions that may alter the Natural quality of the IRA's, no long term cumulative negative effects are anticipated.

Undeveloped:

No cumulative effects would occur to the undeveloped character of the IRAs because no past present or reasonably foreseeable actions are proposed which could alter the undeveloped character in the IRAs. Because there have been no large fires in the BCRP for over a century, the effects of successful fire suppression has likely contributed to higher fuel loadings in some of the forest types across the landscape and that tradeoff has also likely contributed to the risk of large scale high intensity fires into the future. The rationale is that after the prescribed burning is completed, and depending on where and when a fire does ignite in the IRAs, fire managers would have more options for engaging the fires safely, including the choice to let the fire(s) burn for resource benefits with less risk to resources in and around the IRAs.

Solitude and primitive Recreation:

The prescribed burning in the IRAs would be a natural approach to restoring part of the fire dependent ecosystem in the IRAs. Therefore no long term negative cumulative effects would occur to the Solitude and Primitive Recreation Attribute of the IRAs. Short term effects to the recreation user would include specific trail closures, helicopter and chainsaw noise and smoke from prescribed burning operations for a few weeks in the spring and fall.

Special Features

No cumulative effects would occur to the special feature wilderness attribute because actions proposed in this project under alternative 2 would not directly affect any special features in the long term.

Manageability:

No cumulative effects would occur to the "manageability" attribute of the IRAs because no past, present or reasonable foreseeable actions would adversely affect the Forest Service's ability to maintain the IRA's wilderness attributes or meet the minimum size criteria (5,000 acres) for wilderness. None of the proposed alternatives would affect the areas suitability for future wilderness designation.

Table 10 - Resource indicators and measures for alternative 3 (IRAs and Roadless Expanse)

Resource Element	Resource Indicator	<u>Measure</u> Improving, Stable or Degrading)	Key Issue
Wilderness Attributes	Natural	Overall Improving	Yes
	Undeveloped	Overall Improving	Yes
	Primitive and Unconfined Recreation	Stable	Yes
	Special Features	Stable	No
	Manageability (as Wilderness)	Stable	No
Will the alterr	No		

<u>Cumulative Effects to the Inventoried Roadless Area Characteristics of Katka Peak IRA</u> and Mt. Willard Lake Estelle IRAs (Alternative 2 – Burn Units in IRAs)

Soil, water and air resources:

Continued fire suppression when combined with action proposed in alternative 2 could lead to a cumulative effect. Lack of fire in these areas reduces the release of nutrients into soils, could lead to higher fuel loadings for future wildfires, and negatively affects those plants and animals that are dependent on fire. Succession would play a large role with conifers re-establishing populations on post burned landscapes.

Diversity of plant and animal communities:

Continued fire suppression in the IRA's could result in encroachment of trees into existing openings, and the increased shade and competition would further reduce huckleberry, mountain ash and other forage components.

Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land:

When the acres of prescribed fire (4880 acres) proposed under alt 2 are combined with the and those proposed (4054 acres) under the adjacent Starry Goat Project (Kootenai National Forest), cumulatively the prescribed burning activities would improve the quality and quantity of grass and herbaceous forage and potentially increasing long-term berry production (particularly huckleberry and mountain ash) in summer and fall to a larger area (8934 acres). Reduction of overstory cover would allow more sunlight to penetrate and rejuvenation decadent shrubs. Please refer to the wildlife section of this report for more information. It should also directly benefit the white bark pine (USFS, Region 1 Sensitive Plant Species) communities by lower the risk of a stand replacing wildfire. Please review the botany report for additional information.

Primitive, semi-primitive non-motorized and semi-primitive motorized classes of dispersed recreation:

The prescribed burning in the IRAs would be a natural approach to restoring part of the fire dependent ecosystem in the IRAs. Therefore no long term negative cumulative effects would occur to the primitive, semi-primitive non-motorized and semi-primitive motorized classes of dispersed recreation. Short term effects to the recreation user would include specific trail closures, helicopter and chainsaw noise and smoke from prescribed burning operations. When combined with the action proposed under the Starry Goat Project, these effects could occur for a long duration of time and to a larger portion of the Mt. Willard-Lake Estelle IRA

Reference landscapes:

No cumulative effects would occur to the reference landscapes characteristic because actions proposed in this project under alternative 2 would not directly affect the reference landscape in the long term.

Natural appearing landscapes with high scenic quality:

No cumulative effects would occur to the natural appearing landscapes with high scenic quality because actions proposed in this project under alternative 2 would not directly affect the natural appearing landscape in the long term.

Traditional cultural properties and sacred sites:

No cumulative effects would occur to traditional cultural properties and sacred sites because all traditional cultural properties, sacred sites and other locally identified unique characteristics have been avoided and or have specific design features to protect them during project implementation.

Other locally identified unique characteristics:

No cumulative effects would occur to other locally identified unique characteristics because actions proposed in this project under alternative 2 would not directly affect any unique characteristics in the long term.

Summary

Under Alternatives 1 and 3, the IRAs would continue to maintain the appearance of being "Natural" and primarily affected by the forces of nature. Alternatives 1 and 3 would not however, address the human induced changes resulting from years of fire suppression activities. Under Alternative 2, the reintroduction of fire would have the additional benefit of introducing more natural processes to the ecosystem.

Under alternatives 1 and 3, the undeveloped character would not directly change. Under alternative 2, impacts to the undeveloped character of the IRAs would include localized evidence of chainsaw use where fuels reduction operations would include slashing sapling size trees out from under and around valuable old growth trees.

Alternatives 1 and 3 would have no direct effect on opportunities for primitive and semi-primitive recreation. Under alternative 2, impacts could include a short term loss of opportunities for solitude, primitive and unconfined type of recreational experiences during prescribed burning operations.

None of the alternatives would directly affect the Special Features attribute of the IRAs because all traditional cultural properties, sacred sites and other locally identified unique characteristics have been avoided and or have specific design features to protect them during project implementation.

None of the alternatives would affect the Manageability attribute of the IRAs. None of the actions proposed (under any alternative) would adversely affect the Forest Service's ability to maintain the IRA's wilderness attributes or meet the minimum size criteria (5,000 acres) for wilderness.

Degree to Which the Purpose and Need for Action is Met

Table 11 - Summary comparison of environmental effects to Inventory Roadless Areas related resources

Resource Element	Indicator/Measure	Alt 1	Alt 2	Alt 3
Wilderness Attributes	Natural:	Stable	Improving	Stable
	Undeveloped:	Stable	Improving	Stable
	Solitude and Primitive Recreation:	Stable	Stable	Stable
	Special Features	Stable	Stable	Stable
	Manageability	Stable	Stable	Stable
Will the alternative affect the areas suitability for wilderness designation?			No	No

Summary of Environmental Effects

Table 11. Summary comparison of environmental effects to Inventoried Roadless Area (IRA) resources

Resource Element	Indicator/Measure	Alt 1	Alt 2	Alt 3
Wilderness Attribute and corresponding Roadless Characteristics	The Natural Wilderness Attribute Corresponding Roadless Characteristics: High quality or undisturbed soil, water, and air; Sources of public drinking water; Diversity of plant and animal communities; Habitat for threatened, endangered, proposed, candidate, and for sensitive species dependent on large, undisturbed areas of land.	Under Alternative 1, the IRAs would continue to maintain the appearance of being "Natural" and primarily affected by the forces of nature. Alternatives 1 and 3 would not however, address the human induced changes resulting from years of fire suppression activities.	Under Alternative 2, the reintroduction of fire would have the additional benefit of introducing more natural processes to the ecosystem.	Under Alternative 3, the IRAs would continue to maintain the appearance of being "Natural" and primarily affected by the forces of nature. Alternatives 1 and 3 would not however, address the human induced changes resulting from years of fire suppression activities.

Resource Element	Indicator/Measure	Alt 1	Alt 2	Alt 3
Wilderness Attribute and corresponding Roadless Characteristics	The Undeveloped Wilderness Attribute Corresponding Roadless Characteristics: Reference landscapes; Natural appearing landscapes with high scenic quality.	Under alternatives 1 and 3, the undeveloped character would not directly change.	Under alternative 2, impacts to the undeveloped character of the IRAs would include localized evidence of chainsaw use where fuels reduction operations would include slashing sapling size trees out from under and around valuable old growth trees.	Under alternatives 1 and 3, the undeveloped character would not directly change.
Wilderness Attribute and corresponding Roadless Characteristics	The Solitude and Primitive Recreation Wilderness Attribute Corresponding Roadless Characteristics: Primitive, semi-primitive non-motorized, semi-primitive motorized ROS classes of dispersed recreation.	Alternatives 1 would have no direct effect on opportunities for primitive and semi-primitive recreation.	Under alternative 2, impacts could include a short term loss of opportunities for solitude, primitive and unconfined type of recreational experiences during prescribed burning operations.	Alternatives 3 would have no direct effect on opportunities for primitive and semi-primitive recreation.
Wilderness Attribute and corresponding Roadless Characteristics	The Special Features Wilderness Attribute Corresponding Roadless Characteristics: Traditional cultural properties and sacred sites; Other locally identified unique characteristics.	None of the alternatives would directly affect the Special Features attribute of the IRAs because all traditional cultural properties, sacred sites and other locally identified unique characteristics have been avoided and or have specific design features to protect them during project implementation.	None of the alternatives would directly affect the Special Features attribute of the IRAs because all traditional cultural properties, sacred sites and other locally identified unique characteristics have been avoided and or have specific design features to protect them during project implementation.	None of the alternatives would directly affect the Special Features attribute of the IRAs because all traditional cultural properties, sacred sites and other locally identified unique characteristics have been avoided and or have specific design features to protect them during project implementation.
Wilderness Attribute and corresponding Roadless Characteristics	The Manageability Wilderness Attribute Corresponding Roadless Characteristics: No criteria	None of the alternatives would affect the Manageability attribute of the IRAs. None of the actions proposed (under any alternative) would adversely affect the Forest Service's ability to maintain the IRA's wilderness attributes or meet the minimum size criteria (5,000 acres) for wilderness.	None of the alternatives would affect the Manageability attribute of the IRAs. None of the actions proposed (under any alternative) would adversely affect the Forest Service's ability to maintain the IRA's wilderness attributes or meet the minimum size criteria (5,000 acres) for wilderness.	None of the alternatives would affect the Manageability attribute of the IRAs. None of the actions proposed (under any alternative) would adversely affect the Forest Service's ability to maintain the IRA's wilderness attributes or meet the minimum size criteria (5,000 acres) for wilderness.

Compliance with the Forest Plan and Other Relevant Laws, Regulations, Policies and Plans

Alternative 1 & 3 (No Action & No Action in Roadless Areas)

The no action alternatives comply with all relevant laws, regulations, policies and the forest plan.

Alternative 2 (Proposed Action - Burn Units Only in Inventoried Roadless Areas)

Within the Katka Peak IRA, 2157 acres of prescribed burning of would occur under alternative 3. Modification to the Mt. Willard-Lake Estelle IRA and the roadless expanse would include 4880 acres of prescribed burning.

The Idaho Panhandle National Forest Land and Resource Management Plan (Forest Plan)

Alternative 3 would be in compliance with the forest plan. Forest Plan direction - MA5-DC-FIRE-01 states that, "The use of fire serves as the primary tool for trending the vegetation toward the desire conditions as well as serving other important ecosystem functions." Please see the Forest Plan compliance spreadsheet include in the project record for more information.

The Wilderness Act of 1964 (Public Law 88-577) (78 Stat. 890) (September 3, 1964)

Forest Service regulations authorize the use of prescribed fire to reduce unnatural fuel buildups within wilderness if needed to meet wilderness fire management objectives, and: (1) fuel management outside of wilderness will not achieve fire management objectives within wilderness; (2) prescribed fire within wilderness is recommended by an interdisciplinary team; (3) the interested public has been involved in the decision; and (4) lightning caused fires cannot be allowed to burn because they will pose serious threats to wilderness resources or life and property or natural resources outside of wilderness. (FSM 2324.22). In general, prescribed fire is allowed within wilderness as long as it is being used to manage fuels to make it easier to use natural fire in the future or to reduce the risks and consequences of fire inside and outside wilderness. Prescribed fire may not be used in wilderness solely to benefit wildlife, vegetation, forage, or other resource values.

Mechanical treatment and prescribed fire may be utilized within wilderness where consistent with the Wilderness Act and agency regulations, as when necessary to protect public safety. (FSM 2323.52). However, such tools are rarely considered in wilderness because wilderness rarely rises to the priority for treatment that landscapes closer to communities do.

Multiple Use, Sustained Yield Act. June 12, 1960. (74 Stat. 215, as amended: 16 U.S.C. 528-531)

Alternative 3 complies with the Multiple Use, Sustained Yield Act. Nothing proposed under Alternative 3 would preclude the "The establishment and maintenance of areas of wilderness."

Forest Service Manual 2320

Alternative 3 complies with Forest Service Manual 2320. It states that," Two types of prescribed fires may be approved for use within wilderness: those ignited by lightning and allowed to burn under prescribed conditions and those ignited by qualified Forest Service officers." Therefore it is not seen as a non-conforming use of a wilderness area and considered improving the wilderness character of the IRAs found within the project area

Endangered American Wilderness Act of 1978 (Public Law 95-237) (February 24, 1978)

Alternative 2 complies with Endangered American Wilderness Act. Nothing proposed would alter the boundaries of the existing roadless areas found within the project area.

The 2001 Roadless Rule (36 CFR 294, subpart B [2004]; 66 Fed. Reg. 3244 [Jan. 12, 2001])

Under the 2001 Roadless Rule, all acres with uncharacteristic wildland fire hazard in WUI and community public water systems are available to treat with prescribed fire and mechanical tools. A majority of the acres are in Fire Regime Condition Class 2 and 3 therefore, much of the area is in need of treatment to reduce the risk of Uncharacteristic Wildland Fire.

Idaho Roadless Area Rule (36 CFR 294 subpart C [2008]; 73 Fed. Reg. 201 [Oct. 16, 2008])

The Idaho Roadless Rule states that, "Activities away from roads would likely be in the form of prescribed fire or wildland fire use. Any such projects would be designed to maintain or improve roadless characteristics over the long-term."

The roadless characteristic that would be maintained or improved would be the Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land. Benefits to both Whitebark Pine and Grizzle Bears were identified as long-term improvements. Please see the wildlife and botany report for additional information.

Executive Orders - Secretary's Memorandum 1042-154, 155, 156, and the final memorandum issued on 3/2/2012.

All aspects of this alternative were reviewed and vetted through the R1 Regional Foresters Office for approval prior to the release of the EA.

<u>Forest Service Manual 2320 – Wilderness Management</u>

Forest Service managers may ignite a prescribed fire in wilderness to reduce unnatural buildups of fuels only if necessary to meet at least one of the wilderness fire management objectives set forth in FSM 2324.21 and if all of the following conditions are met:

The use of prescribed fire or other fuel treatment measures outside of wilderness is not sufficient to achieve fire management objectives within wilderness.

An interdisciplinary team of resource specialists has evaluated and recommended the proposed use of prescribed fire.

The interested public has been involved appropriately in the decision.

Lightning-caused fires cannot be allowed to burn because they will pose serious threats to life and/or property within wilderness or to life, property, or natural resources outside of wilderness in managing wilderness resources include Forest Cover.

Do not use prescribed fire in wilderness to benefit wildlife, maintain vegetative types, improve forage production, or enhance other resource values. Although these additional effects may result from a decision to use prescribed fire, use fire in wilderness only to meet wilderness fire management objectives.

Intensity Factors for Significance (FONSI) (40 CFR 1508.27(b))

Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

1. <u>Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.</u>

The introduction of prescribed fire into both the Katka Peak and Willard Lake Estelle IRAs would be beneficial to the Natural and Undeveloped attributes of Wilderness. It would also have short term negative impact to the Solitude and Primitive Recreation attributes; however, none of these impacts would be considered significant.

2. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The reintroduction of fire into the Inventory Roadless Areas found within the bounds of the project area would not be considered highly unusual or controversial.

3. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

None of the actions being proposed would adversely affect the potential of the Katka Peak or Willard Lake Estelle IRA's ability to be congressionally designated as Wilderness.

4. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

No laws or requirements are being threatened that are applicable to the Inventoried Roadless Area related resources.

References Cited

- Public Law 86-517, Multiple-Use and Sustained Yield Act of 1960, 86th Congress, June 12, 1960.
- Public Law 88-577, Wilderness Act, 1964. PL (16 U.S.C. 1131-1136).
- Public Law 95-237, Endangered American Wilderness Act of 1978, February 24, 1978.
- USDA, Forest Service. 2001 [Jan. 12]. Special areas; roadless area conservation; final rule. Federal Register. 66 FR 3244, part VI, Department of Agriculture Forest Service, 36 CFR Part 294. http://roadless.fs.fed.us/documents/rule/roadless fedreg rule.pdf. (Accessed October 26, 2007).
- USDA, Forest Service. 2001. Fire Management Today. Volume 61. No. 2. Spring 2001. An Ecologically Based Strategy for Fire and Fuels Management in National Forest Roadless Areas; roadless area conservation; Dominick A. DellaSala and Evan Frost.

 http://www.fusee.org/resources/Documents/fire_mgmt_roadless.pdf
- USDA, Forest Service. 2006. Forest Service Handbook 2309.18 Trails Management Handbook: FSH 2309.18 http://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsh?2309.18
- USDA, Forest Service. 2007. Forest Service Manual 2320 Wilderness Management: FSM 2320. www.fs.fed.us/im/directives/fsm/2300/2320.doc
- USDA, Forest Service. 2008. Roadless Area Conservation National Forest System Lands in Idaho. FIS August 2008. http://www.fs.usda.gov/roadmain/roadless/idahoroadlessrule
- USDA, Forest Service. 2008. Roadless Area Conservation Appendix C. Idaho Roadless Areas Roadless Area Conservation; National Forest System Lands in Idaho FEIS Idaho Panhandle. https://www.fs.usda.gov/Internet/FSE DOCUMENTS/stelprdb5053139.pdf
- USDA, Forest Service. 2009. Salmon Challis national Forest Travel Planning and OHV Designation. Impacts on Roadless Values and Wilderness Attributes in Recommended Wilderness Areas and Idaho Roadless Areas. Joan Dickerson.
- USDA, Forest Service. 2009. Secretary's Memorandum 1042-154
- USDA, Forest Service. 2010. Secretary's Memorandum 1042-155
- USDA, Forest Service. 2010. Our Approach to Roadless Area Analysis and Analysis of Unroaded Lands Contiguous to Roadless Areas.

 https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd528824.pdf
- USDA, Forest Service. 2011. Secretary's Memorandum 1042-156
- USDA, Forest Service. 2012. Secretary's Memorandum 1042-157
- USDA, Forest Service. 2013. Land Management Plan 2013 Revision. Idaho Panhandle National Forest.
- USDA, Forest Service. 2015. Forest Service Handbook 1909.12, Chapter 70 Land Management Planning Handbook Wilderness. Jan 30, 2015 1909.12_70. https://www.fs.fed.us/dirindexhome/fsh/1909.12/wo 1909.12 70.docx